LETTER TO THE EDITOR

Letter to the Editor: Multifocal Tubercular Osteomyelitis - Issues and Dilemma

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Abstract

I read the article "multifocal tubercular osteomyelitis of metatarsal and ulna: a case report," published in your esteemed journal on 7th October 2022, issue with great interest, especially when tuberculosis (TB) is still so prevalent in this country. However, I would like to highlight certain important issues.

Keywords: Foot, Multifocal tuberculosis, Tuberculosis diagnosis.

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Dear Sir,

I read the article "multifocal tubercular osteomyelitis of metatarsal and ulna: a case report," published in your esteemed journal on 7th October 2022, issue with great interest, especially when TB is still so prevalent in this country. However, I would like to highlight certain important issues. The TB of the olecranon mentioned here happened 6 years back, so it does not qualify as a "multifocal TB entity" as there is a possibility of tubercular focus developing elsewhere in the body later. Moreover, there is no radiological evidence of olecranon having any changes seen there even after healing except for the overlying skin scarring now, which raises serious questions about the possibility of tubercular osteomyelitis of olecranon mentioned here. It could have been scrofuloderma, which is the most common type of cutaneous TB in Turkey, or lupus vulgaris, which is the most common type worldwide. Some authors have reported that the frequencies of scrofuloderma and lupus vulgaris are equal. Lupus vulgaris usually results from reinfection of the skin, or it may develop from a direct extension or hematogenous or lymphatic spread from visceral TB. It rarely appears at the site of the bacillus of Calmette and Guérin vaccination. Females are more commonly affected, which is also the case here.[1] Cutaneous TB should make the clinician suspect disseminated TB. Generally, immunocompromised patients have more propensities for disseminated TB, but immunocompetent patients can also have it, and the case reported here was immunocompetent.[2]

There is no mention of complaints regarding any other joints or history of fever, weight loss, loss of appetite, trauma, or septic inoculation. The literature review suggests an incidence of <0.5% of metatarsal TB and among which 1st and 5th rays are commonly involved.[3,4]

With a preliminary diagnosis of chronic osteomyelitis (pyogenic/tubercular/fungal/parasitic), constitutional symptoms such as weight loss, loss of appetite, and fever are seldom seen.[5] Another common etiology attributed to multiple discharging sinuses from the foot is Madura mycosis, a chronic fungal infection of the skin, subcutaneous tissue, and bone. Incidentally, TB and Madura's mycosis are both endemic in tropic and subtropic regions.[6]

Among these, TB metatarsal can present with cystic or spina ventosa like a picture. However, these presentations are not exclusive of TB and are usually confused with miscellaneous infections or tumorous conditions such as chronic pyogenic osteomyelitis, enchondromata, syphilitic dactylitis, fibrous defect, sarcoidosis, brucellosis, Brodie's abscess, fungal osteomyelitis (Madura foot), and ganglion.[7]

The intradermal tuberculin reaction test is positive in 90% of cases of immunocompetent patients, but its negativity does not exclude the diagnosis of TB.[8] Author has not mentioned it. Neither is it supported by histological confirmation of tubercular granuloma.

Martini proposed four stages of radiological classification from discrete epiphyseal osteoporosis to complete joint destruction with deformity.[9] It is worth noting from an academic point of view for the readers.

Osteoarticular TB (OAT) is a paucibacillary form in which the mycobacterium TB is a quiescent, slow multiplication type. Sometimes the diagnosis of OAT is difficult, given its paucibacillary nature. Diagnosis is confirmed using the polymerase chain reaction method. This technique is based on the detection of mycobacterial DNA with a specificity of 92–98%.[10–12]

Bone scintigraphy (with 99 technetium and methylene diphosphate) is very important in such situations. Disseminated TB refers to the involvement of two or more noncontiguous sites. Dissemination can occur during primary infection or after reactivation of a latent focus/reinfection. Miliary TB is an advanced form of disseminated TB. However, military and disseminated TB are not exactly different, according to many authors, and some papers have used the terms interchangeably.[13,14]

A formal dorsal approach to the metatarsal is usually employed. The author needs to mention which approach he used to surgically manage the lesion.

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Also, it can be mentioned here that radiological signs of healing, however, usually lag behind clinical improvement by several weeks. The prognosis is generally good unless adjacent joints are involved.

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